UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

September 27, 2012

Dr. Donald van der Vaart, P.E.
Permitting Section
North Carolina Department of
Environment and Natural Resources
1641 Mail Service Center
Raleigh, North Carolina 27699-1641

Dear Dr. van der Vaart:

Thank you for the submission of the Prevention of Significant Determination (PSD) draft permit and preliminary determination for a proposed project for Klausner Holding USA Inc. located in Enfield, Halifax County, North Carolina. The proposed mill will include a log receiving and storage area, log debarkers, saw mill, drying kilns, six boilers, planer mill, and a lumber loadout area. It has been determined that the project is subject to PSD review for Nitrogen Oxides (NO_x), Carbon Monoxide (CO), Volatile Organic Compounds (VOC), Particulate Matter (PM, PM_{10}, and $PM_{2.5}$), and Greenhouse Gases (GHG).

Based on the U.S. Environmental Protection Agency Region 4 review of the PSD application, preliminary determination, draft PSD permit and modeling review document, we have the following comments:

1. Low NOx Burners and Flue Gas Recirculation were proposed by the applicant for the 4 natural gas boilers in the application, however, we were unable to locate a condition in the permit reflecting this as part of Best Available Control Technology (BACT). The North Carolina Department of Environment and Natural Resources (NCDENR) should provide more information as to why the proposed technologies are not required as part of BACT.

2. The draft permit explains that emissions of NOx, CO, VOC, PM, PM_{10}, and $PM_{2.5}$, and GHG are subject to PSD review, however the draft PSD permit does not contain BACT emission limitations for any of these pollutants on the 4 natural gas boilers. We note that the permit application proposes numeric BACT emission limits for the natural gas boilers for all of these PSD pollutants, except GHGs. As stipulated in the Clean Air Act, BACT is "...an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the Clean Air Act which would be emitted from any proposed major stationary source or major modification..." Please provide an explanation for why BACT emission limits were not included in the draft permit or revise the draft permit to include BACT emission limits for all pollutants subject to PSD, including GHGs. In addition, the draft permit does not contain a GHG BACT limit for the emergency generator. Please provide an explanation for why a numeric GHG limit was not proposed and/or revise the draft permit to include an emission limitation for the GHG emissions from the emergency generator. In establishing GHG BACT limits for the natural gas boilers, NCDENR may want to consider an

output-based limit (*e.g.*, lbs CO_2e/lb of steam produced) or, alternatively, an annual emission limitation (tons per year on a rolling 12-month total) paired with energy efficiency requirements. The latter would be consistent with the format of the BACT limits that were proposed for a similar Klausner project in South Carolina currently on public notice.

Following review of project modeling in the application, Region 4 submitted comments to NCDENR on June 14, 2012. However, no response or further information was received. These comments are in this letter to ensure they are addressed:

The following comments must be addressed in order to meet the requirements of the 40 CFR Part 52, Appendix W: Guideline on Air Quality Models (Modeling Guidance), New Source Review (NSR)/PSD regulations and other Clean Air Act applicable requirements and approvability criteria.

1. NO_2 Monitor Discussion – The use of the of the rural ambient monitor in Paulding County, GA, as reported in Table 3-2, as being representative for the project area is unacceptable according to the memo, "Applicability of Appendix W Modeling Guidance for the 1-hour NO_2 National Ambient Air Quality Standard, June 28, 2010." The *discu*ssion t_o support this choice must have more information than just "traffic counts." The monitor choice was based on traffic counts data and lower monitoring data results (i.e. rural). A thorough discussion of monitors in North Carolina needs to be completed using Section 8.2 Background Concentrations of Appendix W as a guide. This discussion should include source emission type, topographical location and emission rates in addition to traffic counts data. The Community Multi-scale Air Quality (CMAQ) modeling data is available for North Carolina; therefore, modeled output could be used for a "regional site" background monitor. Finally, since the use of monitors in Charlotte or Winston Salem would result in a conservative National Ambient Air Quality Standards (NAAQS) result, other North Carolina monitors could have been considered.

2. Ozone Ambient Impacts Analysis – The ozone discussion appears to be incomplete. A screening model discussion for more than one monitor or average of network ozone monitors could be used to develop a more robust discussion. The closeness of the design values to standard, the emissions inventory used, distances of inventory sources to the monitors, and their affects on the monitor(s) should be discussed.

Recommended Changes:

The following comments should be addressed in the application to clearly provide the Applicant's and State's methodology and rationale for the analyses and conclusions presented.

1. Project Description- A clear graphical representation of the property fence line for the Klausner facility is required to define the areas of ambient air and the location of receptors used in the modeling. This depiction will illustrate and verify that the applicant's property is secured from public access.

2. Class II Receptor Grids – The applicant should report all receptors with concentrations that are greater than or equal to the Significant Impact Level (SIL) and not the "excess of the Significant Impact Level" as stated in page 4-5 of the permit modeling application. However, the applicant's receptor grids (Figures A.7-A.12) did use 100 meter spacing for those receptors that have the modeled concentrations equal to and greater than the SIL for all averaging periods.

Suggested Clarifications

The following comments are suggested clarifications that would be helpful to more clearly portray the information presented.

1. Additional Impacts -For the soils and vegetation impact analysis, the applicant should use the total ambient 1-hour NO_2 NAAQS concentrations from Table 5-6 for total concentrations in Table 5-15 of the application.

2. Project Description (Five (5) Emergency Generators) - The estimated emissions for the various anticipated operating loads (i.e., partial and full load) should be provided as part of the justification for exempting these units from the impact modeling. The anticipated operation of each emergency generator is less than 500 hours/year, which appears to include routine operational testing and emergency operations. The routine and periodic readiness testing which would occur on a random, intermittent fashion will be limited to 100 hours per year for each emergency generator. Each test operation will last less than 30 minutes. The permit should contain these limitations for the emergency generators with Standards of Performance for New Stationary Sources (NSPS) Subpart IIII for engines model year 2011 or later.

Please provide further explanation of the modeling approach used for this draft permit.

If you have any questions about these comments or require additional information, please contact James Purvis at (404) 562-9139 or Richard Monteith at (404) 562 9139 for information related to modeling.

Sincerely,

Gregg M. Worley

Gregg M. Worley
Chief
Air Permits Section